Transverter/PTT Switch Box
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Are you looking to find an easier way to switch your PTT lines or Transverters? Here is a good solution when you're wanting to run one IF radio and multiple transverters. This easily made switch box is something anyone new to building can put together. Parts are all available online. I purchased everything from Amazon and Ebay. Let's get into details.

You will start by getting some supplies together. You're going to need an enclosure, wire, connecters, RCA female bulkheads, LED lights if you choose, an on/off switch, a 6 port 12v coaxial relay switch, an RCA audio video switch box, and most of all, some time!

Here (Figure 1) we have our enclosure, coaxial relay switch and other parts. The relay/switch is 6 ports. The enclosure is just a cheap aluminum box from Amazon. Relays can be found on ebay for $20-50 and are good for about 100W up past 1296/2304 MHz.

Figure 1

Start by marking out or laying out your plan and figuring out where the connections and components are going, etc.

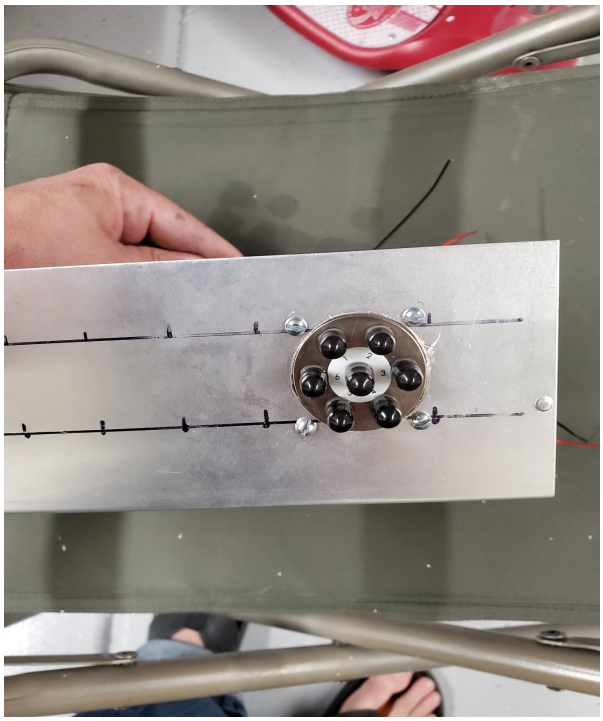

Figure 2

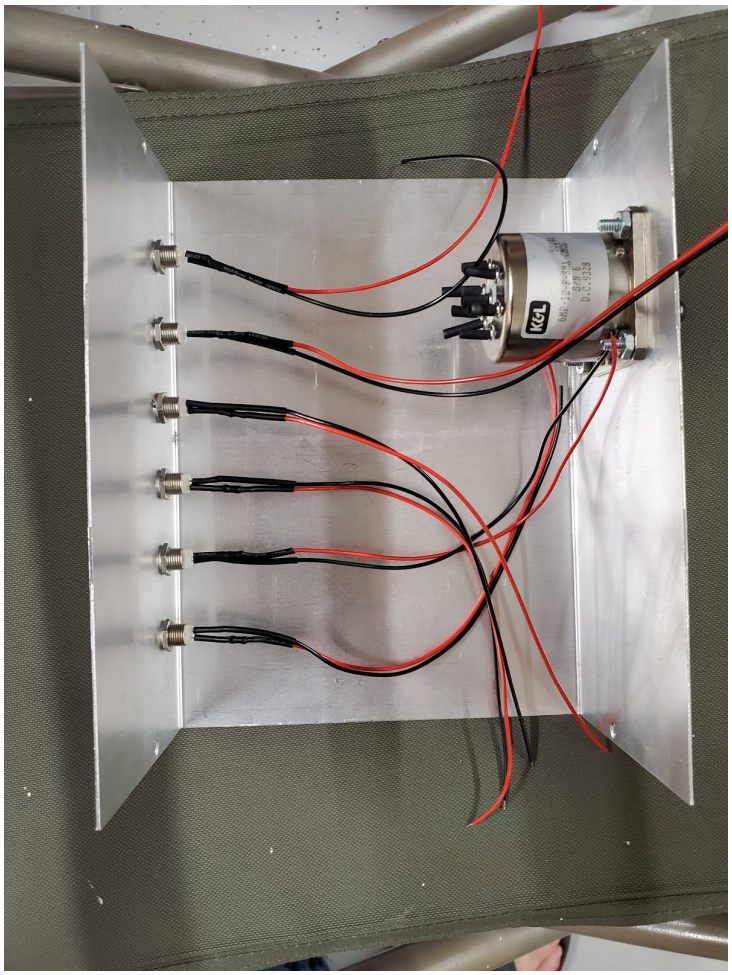

Figure 3

I started by installing the coax relay/switch and soon to be LED indicators. (Figure 3) The LEDs will provide a visual indicator of which port is turned on / what band you are on.

The relay input from your IF radio is in the middle and 6 outputs are the circle. The relay runs on 12v dc and needs 5v dc to switch its output (Figure 2).

A toggle switch and an on/off led indicator are also put on the front of the box. This gives indication of power to the relay and which port is active on the relay. Outside view (Figure 4)

Figure 4

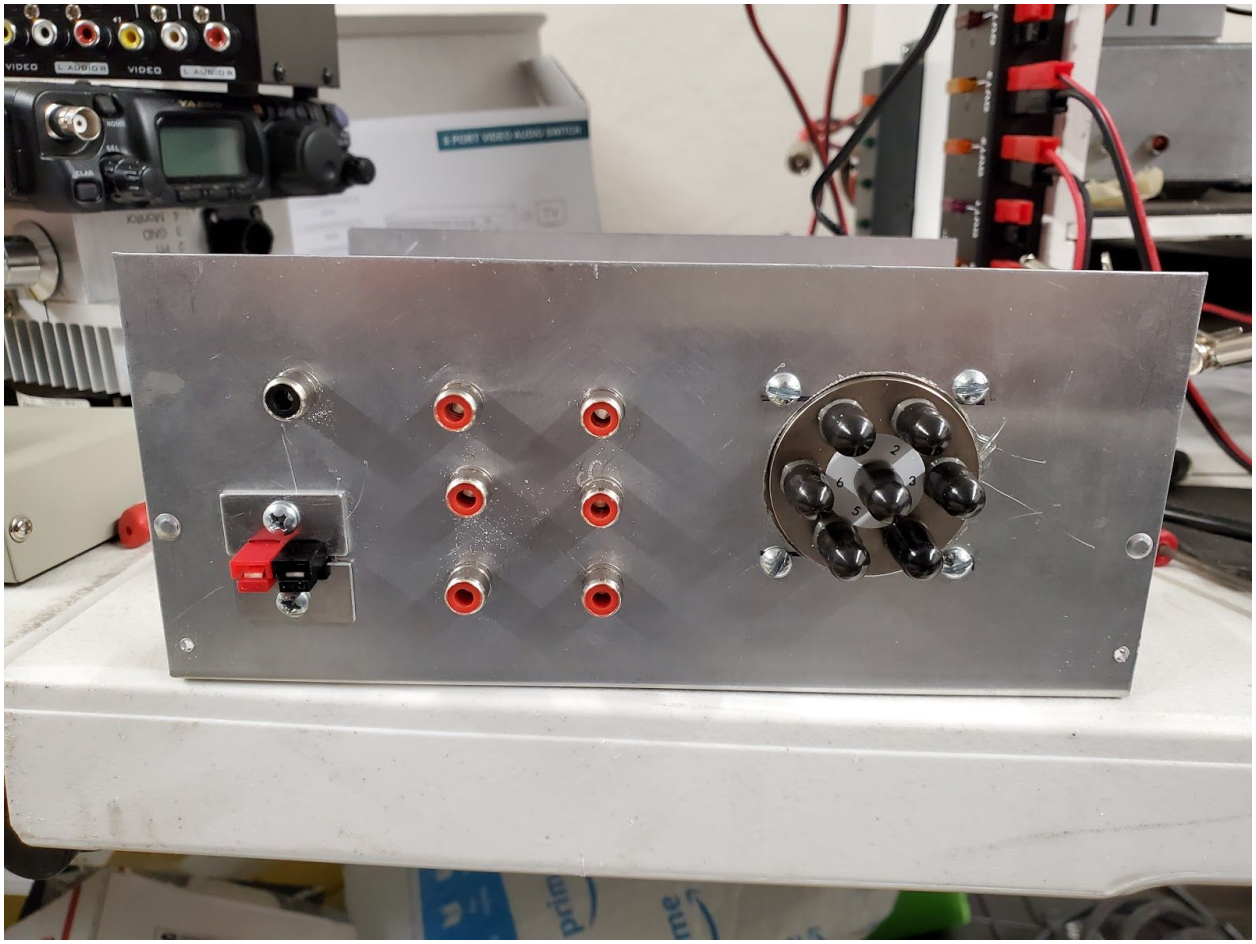

Figure 5

The back of the completed switch box (Figure 5). Anderson connectors are used for main 12v input power. The black RCA will supply 5v dc out from a small dc to dc converter in the box, and the red RCA will be from your control box to supply the coaxial relay to switch outputs. Inside view of the box with wiring complete for power, LEDs, ports and the relay. (Figure 7)

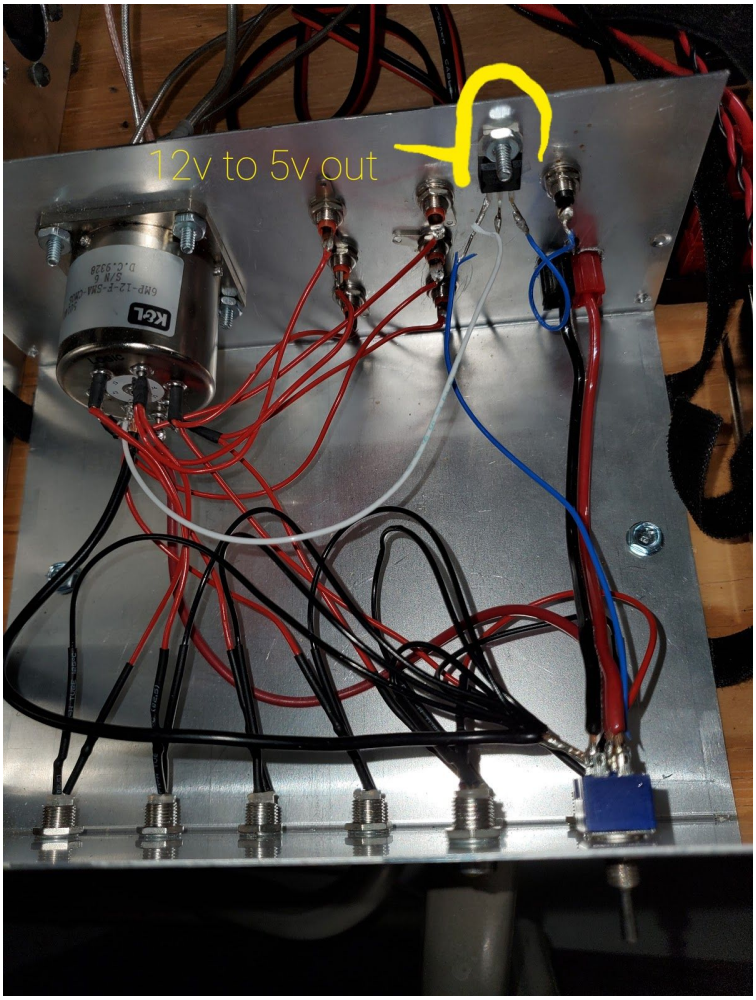

Figure 7

After everything is wired and soldered it is as simple as plugging in some RCA cables from your control head to the newly built switch box. Use your 5v out from the switch box (black RCA) to one of the inputs on the control head (yellow RCA) then the 6 different outs on the control head to its corresponding input on the switching box. (Red to Red). (Figure 8)

The same control box can be used for PTT by simply plugging in your PTT line from your radio to a second input on the AV switch control head then your 6 outputs to your corresponding transverters.

Figure 8

Thanks to KM0T for the idea from his IF switch box. My stripped down version works great for the rover station and allows for very quick switching between bands.

73 - Justin KJ7JC /R